

What is claimed is:

1. A method for operating an internal combustion engine having a compressor, the method comprising the steps of:

5 limiting a pressure ratio across said compressor in dependence upon a mass flow through said compressor utilizing a pump limit to prevent a pumping of said compressor;

making a check in at least one operating state of said engine as to whether a pumping of said compressor occurs; and,

correcting said pump limit in dependence upon the result of said check.

2. The method of claim 1, comprising the further step of detecting the occurrence of said pumping in dependence upon the amplitude of a fresh air mass which is supplied to said engine and oscillates at a pregiven frequency.

3. The method of claim 2, comprising the further step of determining said amplitude utilizing a discrete Fourier transformation of a scanned signal sequence of a detected fresh air mass.

4. The method of claim 2, wherein, in a first range of said amplitude, a first state of said pumping is detected and, in a second range of said amplitude, a second state of said pumping is detected; and, the amplitudes in said second range are  
5 greater than in said first range.

5. The method of claim 4, wherein said pump limit is reduced for a pregiven time by a first pregiven value.

6. The method of claim 1, wherein a new pump limit is formed when the pump limit is corrected in that a previous pump limit is reduced by a second pregiven value.

7. The method of claim 6, wherein the pump limit is corrected in a new driving cycle independently of the check as to the pumping of said compressor; and, a new pump limit is formed in that a previous pump limit is increased by a third pregiven value.

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8. The method of claim 7, wherein said second pregiven value is selected greater than said third pregiven value.

9. The method of claim 1, wherein a correction of said pump limit is only carried out when the newly forming pump limit does not exceed a pregiven course of said pump limit.

10. The method of claim 1, wherein the correction of said pump limit is carried out in segments in dependence upon the mass flow through said compressor.